



Nutrition for Family Living

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June, 2007 Topics

Who Has Time to Cook?

If you think the tomato is your only source of lycopene, think again

Who Has Time to Cook?

By Amy Rettammel

The Economic Research Service (ERS) of USDA analyzed data collected from the 2003-2004 American Time Use Survey to see how different household characteristics affect time spent in food preparation. The findings have implications for the Food Stamp Program and other assistance programs.

Key findings include the following:

- Nonworking women spend about 70 minutes per day in food preparation (defined as time spent preparing, serving, and cleanup).
- Women who work part-time spend about 55 minutes per day in food preparation.
- Women who work full-time spend about 40 minutes per day in food preparation.
- Single women show a similar pattern of spending less time in food preparation with increased time spent working. However compared to married or partnered women, single women spend less time preparing food overall.
- Regardless of income, women spend less time in food preparation the more time they spend working. However compared to women with lower household incomes, women with higher household incomes spend less time preparing food overall.
- Having more children living in the household increases the time a woman spends preparing food.
- Among lower-income women who work full-time, Hispanic and Asian women spend more time preparing food than non-Hispanic, non-Asian women.
- Men spend less time preparing food than women. Nonworking men spend about 28 minutes per day in food preparation; men who work full-time spend about 15 minutes per day in food preparation.

The Thrifty Food Plan (TFP) was developed to show Food Stamp Program participants how low-cost, healthy foods can be purchased with monthly food stamp benefits. The publication, "Recipes and Tips for Healthy, Thrifty Meals" provides daily menus based on the TFP. Studies have estimated that following these menus could take anywhere from 80 minutes to 2-1/2 hours per day on average. There are current efforts to incorporate more convenience foods into the TFP in order to take into account the reality of household time available for food preparation. The following characteristics of Food Stamp households illustrate the importance of helping people prepare quick, healthy meals from the foods they buy with the help of their benefits:

- A growing number of households with someone in the workforce. In 1990, 19% of Food Stamp households had someone in the workforce; in 2005 that was up to 29%.
- The proportion of single-parent households. In 2005, over 62% of Food Stamp households with children were headed by a single adult. These households make up 34% of all Food Stamp households.



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Implications for Extension Educators

Preparing food at home helps individuals and families stretch their food dollars, but demands on time can make preparing meals and snacks challenging. Resources available for teaching about quick and healthy meal preparation include:

- Videos in the Food Basics series described here
http://www.uwex.edu/ces/wnep/tch_res/res_detail.cfm?resource_id=352
- Fast Meals and Quick Snacks cookbook
http://www.uwex.edu/ces/wnep/tch_res/res_detail.cfm?resource_id=373
- Sisters in Health http://www.uwex.edu/ces/wnep/tch_res/res_detail.cfm?resource_id=330
- RecipeFinder Database (where you can search for recipes that take 30 minutes or less to prepare)
<http://foodstamp.nal.usda.gov/recipes.php>

To find other related teaching resources, see the resources listed under the WNEP Food Resource Management objective “Prepare Food”

http://www.uwex.edu/ces/wnep/tch_res/res_list.cfm?topic_id=23

Reference

Mancino L and Newman C. Who Has Time to Cook? How Family Resources Influence Food Preparation. Economic Research Report Number 40, United States Department of Agriculture, 2007. Links to the full report and to the report summary are available here
<http://www.ers.usda.gov/Publications/ERR40/#2007-5-4>.



If you think the tomato is your only source of lycopene, think again

By Jordan P. Mills and Sherry A. Tanumihardjo

Background: Lycopene, a phytochemical found predominantly in tomatoes, has been receiving much attention in recent years because of its potential health benefits. As a powerful antioxidant, lycopene protects our bodies from free radicals, which are those pesky molecules that can cause cell death and tissue damage leading to disease. Consumption of tomatoes and tomato products has been associated with lower risk of some cancers and heart disease. Studies have shown that men with the highest lycopene intake had a 16% less chance of getting prostate cancer than men with the lowest intake. This protection is even higher when comparing intakes of lycopene-rich whole foods like tomatoes and yes, even the tomato sauce on pizza counts. Women have shown a 29% reduction in the incidence of heart disease with higher tomato intake.



Cross sections of yellow, orange and red carrots. The red variety contains lycopene that can be efficiently utilized by the body to ward off potential disease.

Another abundant food source of lycopene is the red carrot, which has recently emerged along with the growing popularity of carrots in general, as an exciting functional food. Carrots have grown in popularity in recent years, due in part to research demonstrating their nutritional value. Plant breeders, like Dr. Phil Simon of the department of Horticulture at the University of Wisconsin-Madison, work to genetically select nutritious carrot strains by applying traditional breeding methods aimed at enhancing nutritional value. A red carrot variety was recently developed to contain abundant levels of lycopene in addition to other healthy phytochemicals such as alpha- and beta-carotene, which can function as antioxidants or be converted to vitamin A, an essential nutrient required by the body.

Current research: Animal feeding studies were recently conducted to test if the lycopene in red carrots can be absorbed and used by the body. The studies showed that red carrots not only provide lycopene that is well absorbed and efficiently used by the body, but they also provide a good source of vitamin A because of the alpha- and beta-carotene present. Whole-food extracts of red carrot were even more effective at promoting vitamin A storage. The alpha- and beta-carotene in the red carrots and extracts were more efficiently converted to vitamin A compared to previous investigations. The conversion factors obtained for beta-carotene from red carrot and red carrot extract were much better than values proposed for typical orange carrots published by the *Institute of Medicine*. This research demonstrates that the red carrot can be a good source of both vitamin A and lycopene. These animal studies confirmed prior studies performed in humans and expanded them by determining the vitamin A value.



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The bottom line: Aside from the tomato, dietary sources of lycopene are limited. The red carrot is an alternative lycopene source that may promote health. As demonstrated in animals, lycopene and other phytochemicals in red carrots can be absorbed and efficiently utilized by the body to fight off free radicals and meet vitamin A requirements. Consumption of lycopene-rich red carrots should be encouraged to promote optimal nutrition and health.

References:

Mills, J.P., Simon, P.W., Tanumihardjo, S.A. β -Carotene from Lycopene Red Carrot Maintains Vitamin A Status but Lycopene Bioavailability is Lower Relative to Tomato Paste in Mongolian Gerbils. *Journal of Nutrition* 2007; 137:1395-1400.

Horvitz, M.A., Simon, P.W., Tanumihardjo, S.A. Lycopene and β -carotene are bioavailable from lycopene 'red' carrots in humans. *European Journal of Clinical Nutrition* 2004; 58:803-811.

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